

WHAT IS CLAIMED IS:

1. A method for controlling a plurality of threads that perform parallel processing, the method comprising the steps of:

monitoring a number of running threads performing parallel processing and a number of standby threads that are in a standby state; and

terminating standby threads in accordance with the number of the running threads and the number of the standby threads.

2. The method according to claim 1, further comprising:

comparing the number of the standby threads with a predetermined necessary number at predetermined time intervals, wherein the standby thread terminating step includes terminating a number of the standby threads exceeding the necessary number when the number of the standby threads is greater than the necessary number.

3. The method according to claim 2, wherein the predetermined necessary number refers to a maximum number of the running threads during a predetermined time period, and the comparing step includes comparing the maximum number of the running threads and the number of the standby threads.

4. The method according to claim 2, wherein the predetermined necessary number refers to an average number of the number of the running threads during a predetermined time period, and the comparing step includes comparing the average number of the running threads and the number of the standby threads.

5           5.     The method according to claim 2, wherein the predetermined necessary number refers to a product obtained by multiplying the number of the running threads during a predetermined time period by a predetermined coefficient, and the comparing step compares the product and the number of the standby threads.

10           6.     A controller for controlling a plurality of threads that perform parallel processing, the controller comprising:

15               a thread management table for storing thread information of the plurality of threads, wherein the thread information includes a number of running threads performing parallel processing and a number of standby threads that are in a standby state;

20               a thread management circuit for, based on the number of the standby threads stored in the thread management table, requesting thread generation and for requesting a standby thread to run; and

25               a thread termination circuit for terminating standby threads in accordance with the number of the running threads and the number of the standby threads stored in the thread management table.

            7.     The controller according to claim 6, wherein the thread termination circuit includes:

30               a comparison circuit for comparing the number of the standby threads and a predetermined necessary number at predetermined time intervals; and

              a termination circuit for terminating a number of the standby threads exceeding the necessary number when the number of the standby threads is greater than the necessary

number.

8. The controller according to claim 7, wherein the predetermined number is a maximum value of the running threads during a predetermined time period.

9. The controller according to claim 7, wherein the predetermined number is an average value of the running threads during a predetermined time period.

10. The controller according to claim 7, wherein the predetermined number is a product obtained by multiplying the number of the running threads during a predetermined time period by a predetermined coefficient.

11. A computer readable storage medium storing a program for controlling a plurality of threads that perform parallel processing, wherein the program performs a method comprising the steps of:

monitoring a number of running threads performing parallel processing and a number of standby threads that are in a standby state; and

terminating standby threads in accordance with the number of the running threads and the number of the standby threads.

12. The storage medium according to claim 11, wherein the method of the program further comprises:

comparing the number of the standby threads with a predetermined necessary number at predetermined time intervals; and

terminating a number of the standby threads exceeding the necessary number when the number of the standby threads

is greater than the necessary number.

13. The storage medium according to claim 12, wherein the predetermined necessary number refers to a maximum number of the running threads during a predetermined time period, and the comparing step includes comparing the maximum number of the running threads and the number of the standby threads.

14. The storage medium according to claim 12, wherein the predetermined necessary number refers to an average number of the number of the running threads during a predetermined time period, and the comparing step includes comparing the average number of the running threads and the number of the standby threads.

15. The storage medium according to claim 12, wherein the predetermined necessary number refers to a product obtained by multiplying the number of the running threads during a predetermined time period by a predetermined coefficient, and the comparing step compares the product and the number of the standby threads.